

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/567,168
Source: IFWP
Date Processed by STIC: 2/10/06

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- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

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<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. **EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE**
2. **U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314**

Revised 01/10/06



IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/567,168

DATE: 02/10/2006
TIME: 09:45:50

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\02102006\J567168.raw

3 <110> APPLICANT: National Institute of Advanced Industrial Science and Technology
4 Takagi, Yasuomi
6 <120> TITLE OF INVENTION: A method for efficient preparation of dumbbell-shaped DNA
8 <130> FILE REFERENCE: FP-041PCT
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/567,168
C--> 11 <141> CURRENT FILING DATE: 2006-02-03
13 <150> PRIOR APPLICATION NUMBER: JP P2003-206905
14 <151> PRIOR FILING DATE: 2003-08-08
16 <160> NUMBER OF SEQ ID NOS: 25
18 <170> SOFTWARE: PatentIn Ver. 2.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 245
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
28 <400> SEQUENCE: 1
29 aaggctgggc aggaagaggg cctatttcc atgattcctt catatttgcata 60
30 aaggctgtta gagagataat tagaattaat ttgactgtaa acacaaaagat attagtacaa 120
31 aatacgtgac gtagaaaagta ataatttctt gggtagttt cagttttaaa attatgttt 180
32 aaaatggact atcatatgct taccgttaact tgaaagtatt tcgatttctt ggctttat 240
33 atctt 245
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 104
38 <212> TYPE: DNA
39 <213> ORGANISM: Artificial Sequence
41 <220> FEATURE:
42 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
44 <400> SEQUENCE: 2
45 aatatttgca tgcgtatg tggctggga aatcaccata aacgtgaaat gtctttggat 60
46 ttgggaatct tataaggctt gtatgagacc acagatcgat cccc 104
49 <210> SEQ ID NO: 3
50 <211> LENGTH: 86
51 <212> TYPE: DNA
52 <213> ORGANISM: Artificial Sequence
54 <220> FEATURE:
55 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
57 <400> SEQUENCE: 3
58 accgttgggt tccgtagtgt agtggttatc acgttcgcct aacacgcgaa aggtccccgg 60
59 ttccgaaaccg ggcactacaa aaacca 86
62 <210> SEQ ID NO: 4
63 <211> LENGTH: 14
64 <212> TYPE: DNA

*Does Not Comply
Corrected Diskette Needed*

pp 2,5,6

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65 <213> ORGANISM: Artificial Sequence
67 <220> FEATURE:
68 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
70 <400> SEQUENCE: 4
W--> 71 ggntgggggg 0 tggg see p. 6 for error explanation 14
74 <210> SEQ ID NO: 5
75 <211> LENGTH: 15
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
82 <400> SEQUENCE: 5
W--> 83 ggntgggnngg gntggg same error 15
86 <210> SEQ ID NO: 6
87 <211> LENGTH: 16
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial Sequence
91 <220> FEATURE:
92 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
94 <400> SEQUENCE: 6
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98 <210> SEQ ID NO: 7
99 <211> LENGTH: 17
100 <212> TYPE: DNA
101 <213> ORGANISM: Artificial Sequence
103 <220> FEATURE:
104 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
106 <400> SEQUENCE: 7
W--> 107 ggntgggnnnn ggntggg same 17
110 <210> SEQ ID NO: 8
111 <211> LENGTH: 15
112 <212> TYPE: DNA
113 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:
116 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
118 <400> SEQUENCE: 8
119 ggcgttcggg gggta 15
122 <210> SEQ ID NO: 9
123 <211> LENGTH: 63
124 <212> TYPE: DNA
125 <213> ORGANISM: Artificial Sequence
127 <220> FEATURE:
128 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
130 <400> SEQUENCE: 9
131 ggctatgtct aggagtgtac ctagaattac atcaagggag atggtgcgct cctggacgta 60
132 gcc 63
135 <210> SEQ ID NO: 10
136 <211> LENGTH: 53
137 <212> TYPE: DNA
  
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Input Set : A:\PTO.RJ.txt
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138 <213> ORGANISM: Artificial Sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
143 <400> SEQUENCE: 10
144 gggtaattgg tagattaagc ggtgtctgt cccgcttgcat ctgccaatttgc 53
147 <210> SEQ ID NO: 11
148 <211> LENGTH: 43
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
155 <400> SEQUENCE: 11
156 ggaaattcac ctgccccgca gggtttccc agtcacgacg ttg 43
159 <210> SEQ ID NO: 12
160 <211> LENGTH: 46
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
167 <400> SEQUENCE: 12
168 ggctgcagac ctgcccccca ccgagcggat aacaatttca cacagg 46
171 <210> SEQ ID NO: 13
172 <211> LENGTH: 34
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
179 <400> SEQUENCE: 13
180 ggtgtgtccg cggtggcttt tgccaaacgcg gaca 34
183 <210> SEQ ID NO: 14
184 <211> LENGTH: 59
185 <212> TYPE: DNA
186 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
191 <400> SEQUENCE: 14
192 cctcggccata tagttagtcg tattaggcgg gaaccgcata atacgactca ctataggcc 59
195 <210> SEQ ID NO: 15
196 <211> LENGTH: 41
197 <212> TYPE: DNA
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
203 <400> SEQUENCE: 15
204 ttaggagttt tctccataagc gttttccag tcacgacgtt g 41
207 <210> SEQ ID NO: 16
208 <211> LENGTH: 41
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence

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Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\02102006\J567168.raw

212 <220> FEATURE:
213 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
215 <400> SEQUENCE: 16
216 ttaggagttt tctcctaagg gttttccca gtcacgacgtt g 41
219 <210> SEQ ID NO: 17
220 <211> LENGTH: 41
221 <212> TYPE: DNA
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
227 <400> SEQUENCE: 17
228 ttaggagttt tctcctaagg gttttccca gtcacgacgtt g 41
232 <210> SEQ ID NO: 18
233 <211> LENGTH: 44
234 <212> TYPE: DNA
235 <213> ORGANISM: Artificial Sequence
237 <220> FEATURE:
238 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
240 <400> SEQUENCE: 18
241 ttaggtcttt tgacctaagg gagcggataa caatttcaca cagg 44
244 <210> SEQ ID NO: 19
245 <211> LENGTH: 39
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
252 <400> SEQUENCE: 19
253 gttttccca gtcacgacgtt gaagggtcggg caggaagag 39
256 <210> SEQ ID NO: 20
257 <211> LENGTH: 44
258 <212> TYPE: DNA
259 <213> ORGANISM: Artificial Sequence
261 <220> FEATURE:
262 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
264 <400> SEQUENCE: 20
265 gagcggataa caatttcaca caggaaaaaag gctacgtcca ggag 44
268 <210> SEQ ID NO: 21
269 <211> LENGTH: 417
270 <212> TYPE: DNA
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
276 <400> SEQUENCE: 21
277 ttaggagttt tctcctaagg gttttccca gtcacgacgtt gaagggtcggg caggaagagg 60
278 gccttatttc catgatttcct tcatatttgc atatacgata caaggctgtt agagagataa 120
279 ttagaattaa ttgactgtt aacacaaaaga tattagtaca aaatacgtga cgtagaaaagt 180
280 aataatttct tgggttagttt gcagttttaa aattatgttt taaaatggac tatcatatgc 240
281 ttaccgttaac ttgaaagtat ttgcatttct tggctttata tatcttgtgg aaaggacgaa 300
282 acaccqgcta tqtctaggag tqtacctaga attacatcaa gggagatgtt gcgctctgg 360

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/567,168

DATE: 02/10/2006
TIME: 09:45:50

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Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\02102006\J567168.raw

283 acgttagcctt ttcctgtgt gaaattgtta tccgctcgct taggtcaaaa gacctaa 417
285 <210> SEQ ID NO: 22
286 <211> LENGTH: 93
287 <212> TYPE: DNA
288 <213> ORGANISM: Artificial Sequence
290 <220> FEATURE:
291 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
293 <400> SEQUENCE: 22
294 tttcccatga ttccttcata tttgcattt accgtaactt gaaagtattt cgattcttg 60
295 gctttatata tcttggaa aggacgaaac acc 93
298 <210> SEQ ID NO: 23
299 <211> LENGTH: 109
300 <212> TYPE: DNA
301 <213> ORGANISM: Artificial Sequence
303 <220> FEATURE:
304 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
306 <400> SEQUENCE: 23
307 tttcccatga ttccttcata tttgcataa ggactatcat atgcttaccg taacttgaaa 60
308 gtatttcgat ttcttggctt tataatatctt gtggaaagga cggaaacacc 109
311 <210> SEQ ID NO: 24
312 <211> LENGTH: 58
313 <212> TYPE: DNA
314 <213> ORGANISM: Artificial Sequence
316 <220> FEATURE:
317 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
319 <400> SEQUENCE: 24
320 gcagaagcta tgaaacgatt tgcttcgtt cacaatcg tcatagcttc tgctttt 58
322 <210> SEQ ID NO: 25
323 <211> LENGTH: 240
324 <212> TYPE: DNA
325 <213> ORGANISM: Artificial Sequence
327 <220> FEATURE:
328 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
330 <400> SEQUENCE: 25
331 tttcccatga ttccttcata tttgcataa cgataacaagg ctgttagaga gataattaga 60
332 attaatttgc ctgttaaacac aaagatatta gtacaaaata cgtgacgtag aaagtaataa 120
333 tttcttgggt agttgcagt tttaaaattt tgttttaaa tggactatca tatgcttacc 180
334 gtaacttqaa aqatttcga tttcttggctt tataatatct tttggaaagg acgaaacacc 240
W--> 338 (continued from previous page)
W--> 339 (continued on next page)
W--> 342 (continued from previous page)
W--> 343 (continued on next page)

delte

VARIABLE LOCATION SUMMARY
PATENT APPLICATION: US/10/567,168

DATE: 02/10/2006
TIME: 09:45:51

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\02102006\J567168.raw

error explanation

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:4; N Pos. 3,7,8,11
Seq#:5; N Pos. 3,7,8,9,12
Seq#:6; N Pos. 3,7,8,9,10,13
Seq#:7; N Pos. 3,7,8,9,10,11,14

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VERIFICATION SUMMARY
PATENT APPLICATION: US/10/567,168

DATE: 02/10/2006
TIME: 09:45:51

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\02102006\J567168.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:71 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:4
L:71 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:4
L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:83 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:5
L:83 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:5
L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:95 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:6
L:95 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:6
L:95 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:107 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:7
L:107 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:7
L:107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:338 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:4
L:339 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:25
L:339 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:4
L:342 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:25
L:342 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:4
L:343 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:25
L:343 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:4